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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,030	02/17/2004	Rainer Schneider	5497-67414	2830

24197 7590 02/08/2006
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EXAMINER

DONAHOE, CASEY D

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/781,030		SCHNEIDER, RAINER	
	Examiner		Art Unit	
	Casey Donahoe		3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/7/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-12 claim an adapter within a handpiece system. Although only the adapter is claimed, limitations regarding the handpiece system including the supply conduit and medical instrument are recited. It is unclear whether or not to consider these limitations since they do not correspond to the claimed structure, which is the adapter.

Claim Rejections - 35 USC § 103

Claims 1-7, 13-19, 25-27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchetti et al. (EP 1103232 A1) in view of Mosimann (US 6,033,220)

Regarding claims 1-4, 13-16, and 25-27, Bianchetti et al. disclose a handpiece system including a supply conduit (8), a medical instrument containing an LED light source (103; Fig. 5), and an adapter there between (101), where electrical power is transmitted from the supply conduit through the adapter to the light source. Because

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the light source consists of an LED, it inherently requires electrical power to be supplied in a selected polarity. The adapter includes two electrical leads (106) detachably connected to two contacts (111, 112) in the operating element. Bianchetti et al. fail to disclose that the adapter is selectively switchable to match the polarity required by the operating element of the medical instrument. Mossiman discloses a revolving connector assembly which uses annular electrical contacts (40, 42), as seen in Fig. 2, in order to allow rotation (column 3, line 65). These rotating constructions are extremely well known in the art to allow the practitioner more freedom of movement and maneuverability when using the connected handpiece instrument. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the adapter disclosed by Bianchetti et al. with an internal construction as described by Mossimann to revolve around the connecting end of the supply conduit in order to provide freedom of movement and maneuverability to the practitioner. Because the electrical leads and contacts are disposed diametrically to each other, the adapter and connector (110) of the handpiece are symmetric about their center lines (Fig. 4-5), and the adapter contains no aligning means, the adapter is inherently capable of being inserted in two orientations, disposed 180 degrees from each other, in which the adapter leads align with the handpiece's contacts. In opposing orientations the leads are connected to opposing electrical contacts, and thus the polarity of the electric power supplied to the handpiece may be reversed by simply rotating the adapter 180 degrees and reconnecting it to the handpiece.

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Regarding claim 5 and 18, the end of the lead must be connected to a slide contact (42) as disclosed by Mossimann (Figs 2-3).

Regarding claim 6 and 19, the leads (106) and contacts (111, 112) may not rotate with respect to each other, and are not connected by a rotatable plug.

Regarding claim 7, the adapter disclosed by Bianchetti includes lines (105) for fluids or drive energy, and Mossimann also includes such lines and means to incorporate them in a revolving adapter (column 4, lines 11-18).

Regarding claim 17, the medical instrument comprises a light conductor (32).

Regarding claim 30, examiner takes official notice that "trial and error" is an obvious and well known method for determining the correct choice among a set of options. Because there is disclosed no indication for the correct orientation of the adapter relative to the handpiece, it would have been obvious to one of ordinary skill in the art at the time of the invention to insert the adapter, connect the adapter and handpiece in one orientation, attempt to operate the handpiece, then reverse the orientation if the handpiece does not operate.

Claims 1, 8-12, 13, 20-24, 25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchetti et al. in view of Badger (US 3,042,835)

Bianchetti et al. disclose the handpiece system described above, including an LED operated medical instrument, adapter, and supply conduit. Bianchetti et al. fail to disclose that the adapter is selectively switchable to match the polarity required by the operating element of the medical instrument. Badger discloses a lighting apparatus,

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which requires power of a certain polarity in order to operate (column 2, line 46 – column 3, line 9). Badger discloses a polarity reversing switch (46), in which substantially fixed/rigid leads and substantially fixed/rigid connectors are separated by movable portions (Fig. 2). The movable portions may move between different circuit routings, which reverse the polarity of the power transmitted to the lamp. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the adapter disclosed by Bianchetti et al. with the polarity reversing switch disclosed by Badger in order that the polarity of the power may be reversed if needed, when operating an LED curing light. This would allow a more universal use of the adapter, which could be connected to operating elements, possibly including LED's, motors, etc., which may require different polarity to operate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Fleer (US 5,057,015), Loge (US 5,653,591), Hatley, Jr. (US 6,305,934), Leonard et al. (US 4,720,266), Dietz (US 3,215,139), Goble et al. (US 5,860,975), Nakayama et al. (US 4,804,329), and Dernehl (US 5,593,323) are made of record.

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
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Casey Donahoe whose telephone number is (571) 272-2812. The examiner can normally be reached on Monday - Thursday (7:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272 -4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ralph A. Lewis
Primary Examiner
AU 3732

Casey Donahoe
Examiner
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2/6/06